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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,730	08/31/2000	William B. Boyle	K35A0665	3613

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WESTERN DIGITAL TECHNOLOGIES, INC.

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E-118G - INTELLECTUAL PROPERTY DEPARTMENT

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EXAMINER

ONUAKU, CHRISTOPHER O

ART UNIT

PAPER NUMBER

2616

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/652,730	<b>Applicant(s)</b> BOYLE ET AL.	
	<b>Examiner</b> Christopher Onuaku	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19&21-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/2/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-19&21-30 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-12,19&22-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Mendelsohn (US 6,771,886).

Regarding claim 1, Mendelsohn discloses in Fig.1&2 a method and apparatus for controlling a content recording apparatus, including utilizing user availability criteria to determine whether content should be recorded on a recording device, comprising:

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a) at least one recorder interface connectable to an auxiliary interface (see Fig.1 which shows where the recording device 110 (see col.4, lines 38-44) is connected to the receiving device (set-top box) 130 through the connection 195 with an inherent interface in order for the receiving device 130 to be connected to the recording device 110; col.3, lines 24-36);

b) a storage device ( see Fig.1&2 and memory 118 within the recording device 110; ; col.3, lines 24-36 and col.5, lines 33-42);

c) a microprocessor configured to control the digital video recorder and the set-top box, the microprocessor comprising an electronic program guide subsystem connected to the recorder interface to receive the electronic program guide information from the set-top box and to process the electronic program guide information to schedule recording the broadcast audiovisual data on the storage device (see Fig.1&2 and processor 120 within the recording device 110; col.3, line 17 to col.5, line 42, and col.6, lines 28-55).

Regarding claim 2, Mendelsohn discloses wherein the electronic program guide subsystem comprises an electronic program guide processor ( as discussed in claim 1 above, see Fig.1, processor 120 within the recording device 110; col.4, lines 44-55 and col.6, lines 37-41).

Regarding claim 3, Mendelsohn discloses wherein the electronic program guide subsystem further comprises an electronic program guide manager ( as discussed in claims 1&2 above, see Fig.1, processor 120).

Regarding claim 4, Mendelsohn discloses wherein the electronic program guide subsystem further comprises an electronic program guide storage buffer to store the electronic program guide information (see Fig.1, memory 118 within the recording device 110; col.3, lines 24-36; and col.5, lines 33-42).

Regarding claim 5, Mendelsohn discloses wherein the electronic program guide subsystem is configured to present processed electronic program guide information to a user (see discussions in claim 1 above.)

Regarding claim 6, Mendelsohn discloses wherein the digital video recorder receives the electronic program guide (EPG) information and broadcast audiovisual data from a single source ( see Fig.1, receiving device 130 and processor 120; col.3, lines 24-53) here the program to be recorded and the EPG are both received by the recording device through the receiving device 130.

Regarding claim 7, Mendelsohn discloses wherein the single source is the set-top box (see claim 6 discussions, and Fig.1, and the receiving device 130).

Regarding claim 8, Mendelsohn discloses wherein the digital video recorder receives the electronic program guide (EPG) information and broadcast audiovisual data from a single interface (see claim 1 discussions), examiner reads the single interface as the recording device 110 interface.

Regarding claim 9, Mendelsohn discloses wherein the digital video recorder receives the electronic program guide (EPG) information as a component of one or more channels of the broadcast audiovisual data ( see col.3, line 63 to col.4, line 8, and col.5, lines 10-20).

Regarding claim 10, Mendelsohn discloses wherein the electronic program guide (EPG) subsystem is configured to receive updated EPG information from the set-top box, where the set-top box is configured to detect updated EPG information (see col.5, lines 33-42).

Regarding claim 11, Mendelsohn discloses wherein the EPG subsystem is configured to receive EPG information selectively transmitted by the set-top box via the auxiliary interface and the recorder interface ( see col.3, lines 24-53 and col.4, lines 18-55).

Regarding claim 12, Mendelsohn discloses wherein the EPG subsystem is configured to transmit a request signal to the set-top box, where the set-top box is configured to selectively transmit the EPG information to the EPG subsystem in

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response to the request signal (see col.3, lines 24-53 and col.4, lines 18-44), here the user selects a content portion (program) that the user wishes to view or record, which constitutes a request. Based on the user's request the recording device 110 then queries the EPG for the occurrences of the program selected (requested) by the user. The EPG and the program are received by the recording device 110 through the receiving device 130.

Regarding claim 19, the claimed limitations of claim 19 are accommodated in the discussions of claim 1 above.

Regarding claim 22, the claimed limitations of claim 22 are accommodated in the discussions of claim 1 above, except recognizing the connection of the digital video recorder to the set-top box, which is inherent in the Mendelsohn EPG system in order for Mendelsohn EPG system to function efficiently, whereby the receiving device 130 of Fig.1 communicates with the recording device 110 of Fig.1, which facilitates the user recording of desired broadcast programs.

Regarding claim 23, Mendelsohn discloses wherein the EPG information and broadcast audiovisual data are transmitted to the set-top box from a single source ( see claim 6 discussions).

Regarding claim 24, Mendelsohn discloses wherein the EPG information and broadcast audiovisual data are received by an input interface of the set-top box source (see claim 1 discussions).

Regarding claim 25, Mendelsohn discloses wherein the EPG information is included in the broadcast audiovisual data (see claims 23&24 discussions).

Regarding claim 26, the claimed limitations of claim 26 are accommodated in the discussions of claim 10 above.

Regarding claim 27, the claimed limitations of claim 27 are accommodated in the discussions of claim 11 above.

Regarding claim 28, the claimed limitations of claim 28 are accommodated in the discussions of claim 12 above.

Regarding claim 29, Mendelsohn discloses wherein the transmitting of EPG information from the set-top box is performed selectively in response to user input (see claim 12 discussions).

Regarding claim 30, the claimed limitations of claim 30 are accommodated in the discussions of claim 4 above.



***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13,14,16&17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendelsohn in view of Wugofski (US 6,003,041).

Regarding claims 13&14, Mendelsohn fails to disclose wherein the at least one auxiliary interface supports isochronous communication and wherein the at least one auxiliary interface supports isochronous communication. Wugofski teaches the selection, and presentation of media signals from multiple channels of multiple sources to a multimedia system comprising VCR, connection box/STB, RF TV, and where conventional control functions for these devices may be achieved by wired interfaces such as those described in the IEEE-1394 standard (see col.2, line 66 to col.3, line 28). It is well known by one of ordinary skill that IEEE-1394 interface supports isochronous communication. It would have been obvious to further modify Mendelsohn by connecting the electronic devices (recording device, receiving device, display 140) of the EPG system through the IEEE-1394 interface, since the IEEE-1394 interface supports isochronous and asynchronous communication

Regarding claim 16, the claimed limitations of claim 16 are accommodated in the discussions of claim 13 above.

Regarding claim 17, the claimed limitations of claim 17 are accommodated in the discussions of claim 14 above.

6. Claims 15&18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendelsohn in view of Jackson (US 5,963,264).

Regarding claim 15, Mendelsohn fails to explicitly disclose wherein the at least one auxiliary interface supports synchronous communication.

Jackson teaches in Fig.1 a method and apparatus for controlling all models of VCRs via infrared signals by providing the infrared codes necessary to operate each particular brand and model VCR and real time program scheduling information in the data stream comprising VCR device 38, packet synchronization module 24 and the program clock reference that keeps the local clock synchronized with the clock at the uplink center (see col.3, line 51 to col.4, line 35).

It would have been obvious to further modify Mendelsohn by applying the synchronous processing principle of Jackson to Mendelsohn in order, for example, to synchronize the corresponding audio and video signals of Mendelsohn, and it would have been obvious that the recording device 110 of Mendelsohn would record the synchronized audio and video signals received through the recording device 110 interface, thereby supporting synchronous communication.

Regarding claim 18, the claimed limitations of claim 18 are accommodated in the discussions of claim 15 above.

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mendelsohn in view of Lawler et al (US 5,699,107).

Regarding claim 21, Mendelsohn fails to disclose wherein the digital video recorder comprises a user viewing monitor that keeps track of and compiles a user viewing history and set of user preferences.

Lawler et al teach in Fig.1 a system for informing a user of an interactive viewing system that a selected program is available for viewing and a system for allowing a user to select a future program for later reminding comprising local area network (LAN) 24 that includes multiple computer servers 26 for performing various interactive system applications or functions. The servers 26 which store and process information at the headend, may include, for example, service and application servers (SAS) 30, continuous media servers 32 and electronic program guide data servers 34. The service and application servers 30 processes interactive service requests from subscribers and provides services and applications associated with, for example, network monitoring functions. The service and application servers 30 may also contain a subscriber database. The subscriber database may store subscriber specific information such as each user's identity, a login code which identifies different users, a user's viewing preferences and history. The various functions of the servers 26 may be combined so as to be carried out by a single server (see col.4, line 27 to col.5, line 12).

Providing a viewing monitoring means that keeps track of user viewing history and set of user preferences provides the desirable advantage of making available to a

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service provider the mechanism to track what type of programs viewers watch more often so that the service provider could then target such viewers with such similar programs.

It would have been obvious to further modify Mendelsohn by realizing Mendelsohn with a viewing monitoring means that keeps track of user viewing history and set of user preferences, since providing a viewing monitoring means that keeps track of user viewing history and set of user preferences provides the desirable advantage of making available to a service provider the mechanism to track what type of programs viewers watch more often so that the service provider could then target such viewers with such similar programs.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Onuaku whose telephone number is 571-272-7379. The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

COO

2/14/06

  
**James J. Groody**  
**Supervisory Patent Examiner**  
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